impact of these in a big corporation in Hong Kong from an employer's perspective.
METHODS: A questionnaire to study the 11,000 employees of a Hong Kong-based major international airline company was developed. The two major categories of employees surveyed were the ground staff and the flight crew due to different working environments and thus different risk factors for flu. The questionnaire captured information on the age, sex, years of service, grade and number of episodes in the past 12 months. Information about the nature and duration and of the effects on the well being of the individual during each episode was obtained. The need for medical treatment and days off was also documented.
RESULTS: Eleven thousand questionnaires were sent out and 2,212 were returned (response rate 20.1%). Among the flight crew, each member of the cockpit and cabin crews was estimated to lose on average 14.4 and 13.0 "equivalent days of perfect health" (EDPH) per year respectively. For the ground staff, each member of the check-in and back-office staff was estimated to lose 6.9 EDPH and 8.7 EDPH per year respectively. In terms of productivity, depending on the salary-scale of the staff, between HK$2,321 (check-in staff), (1US$ = 7.8HK$), and HK$36,791 (cockpit crew) was lost per year per worker. Evidence indicated that a disproportionately large proportion of the flu episodes among aircrew occurred during or after a trip to Europe and S.E. Asia.
CONCLUSION: The impact of FFLIs on flight crew appears to be greater than the impact on ground staff.

PIN15

ECONOMIC COMPARISON OF SEQUENTIAL (IV TO PO) CIPROFLOXACIN/ METRONIDAZOLE VS PIPERACILLIN/TAZOBACTAM FOR THE TREATMENT OF PATIENTS WITH COMPLICATED INTRA-ABDOMINAL INFECTIONS

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OBJECTIVE: A double-blind, randomized, multicenter clinical study comparing ciprofloxacin/metronidazole (CIP/MET) versus piperacillin/tazobactam (PIP/TAZO) in hospitalized adult patients (pts) with severe intra-abdominal infections was the basis for this pharmacoeconomic analysis.
METHODS: A cost-effectiveness analysis from a hospital provider perspective was conducted. Cost-effectiveness ratios (CER) were calculated.
RESULTS: Among 276 evaluable pts, 148 received CIP/MET and 128 received PIP/TAZO. IV-PO: 65% (96/148) CIP/MET and 59% (75/128) PIP/TAZO pts were switched to oral administration. IV-PO CIP/MET pts with appendicitis had an 89% success rate; mean treatment duration was 6.4 ± 3.4 days and mean CER was US$7,696. Similar pts who received PIP/TAZO had a 68% success rate; mean treatment duration was 5.4 ± 2.7 days and mean CER was US$10,372. IV-PO CIP/MET non-appendicitis pts had an 83% success rate; mean treatment duration was 7.7 ± 2.6 days and mean CER was US$11,114. Similar pts who received PIP/TAZO had a 72% success rate; mean treatment duration was 8.5 ± 4.8 days and mean CER was US$13,331. IV Only: CIP/MET appendicitis pts had a success rate of 87%; mean therapy duration was 5.0 ± 2.2 days and mean CER was US$7,328. Similar pts who received PIP/TAZO had a 56% success rate; mean treatment duration was 6.4 ± 3.1 days and mean CER was US$10,980. Non-appendicitis CIP/MET pts had a success rate of 45%; mean therapy duration was 13.3 ± 9.5 days and mean CER was US$17,881. Similar pts who received PIP/TAZO had a 52% success rate; mean treatment duration was 11.6 ± 8.2 days and mean CER was US$17,944. Sensitivity analysis revealed that PIP/TAZO needed to be 10 to15% more successful in order to be cost-effective.
CONCLUSION: Whether pts had appendicitis or not, and whether they could be switched to oral antibiotics or not, the combination of ciprofloxacin/metronidazole was found to be cost-effective compared to piperacillin/tazobactam.

PIN16

COST-EFFECTIVENESS OF TERBINAFINE AND ITRACONAZOLE IN TOENAIL ONYCHOMYCOSIS IN POLAND: MODELLING STUDY WITH THREE-YEAR TIME HORIZON

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OBJECTIVES: To compare three-years costs and effects of terbinafine 250 mg/d for 12 or 16 weeks (T12, T16) and itraconazole 400 mg/d for 1 week every 4 weeks for 12 or 16 weeks (I3, I4) and select the optimal treatment strategy for toenail onychomycosis in Poland.
METHODS: Data from the literature (a search of Medline reports with time horizon >1 year, intent-to-treat design) were used to estimate the mycological cure rate. Direct medical costs were estimated on the basis of current treatment patterns in Poland. The perspective of the health-care payers (sick fund and patients) and a time horizon of three years were taken. Costs and effects of the treatment strategies were modeled using six scenarios, which attempt to reflect real-life practice: T12 or T16 as primary treatment, I3 as treatment of failure and T12 or I3 as treatment of re-infection (T12/I3,T12; T12/I3,I3; T16/I3,T12; T16/I3,I3) and I3 or I4 as primary treatment, T12 as treatment of failure and re-infection (I3/T12, T12; I4/T12, T12). One-way sensitivity analysis and threshold analyses were performed.
RESULTS: The mean cost/mycological cure (in PLN, 1 USD = 4 PLN) were: 1925 for T12/I3,T12; 1986 for T12/I3,I3; 2175 for T16/I3,T12; 2244 for T16/I3,I3; 2375 for I3/T12,T12 and 2477 for I4/T12,T12. The strategy T12/I3,I3 was dominated by T12/I3,T12. The

strategies T16/I3,I3 and I3/T12,T12 were dominated by T16/I3,T12. The incremental analysis vs. strategy T12/I3,T12 indicated, that T16/I3,T12 and I4/T12,T12 were not cost-effective alternatives for T12/I3,T12 with ICER 14 743 and 19 687 PLN/mycological cure gained, respectively. Changing the values of key drivers in the sensitivity analysis did not have any significant effect on ICER.
CONCLUSION: T12 as primary treatment with I3 as treatment of failure and T12 as treatment of re-infection was the most cost-effective treatment for toenail onychomycosis in Poland.

PIN17

HOW CAN PRODUCTS WITH MARGINAL EFFICACY SAVE MONEY? THE EXAMPLE OF A NON SPECIFIC, IMMUNOSTIMULATING, PREVENTIVE TREATMENT FOR RECURRENT UPPER RESPIRATORY TRACT INFECTIONS IN CHILDREN

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OBJECTIVE: Upper respiratory tract infections are frequent in children. Their economic impact is widely unknown. This study responded to a request from the French Economic Committee to estimate the direct cost of an acute rhino-pharyngitis (ARP), the effectiveness of Imocur® (OM-85 BV indicated for the prevention of recurrences), and the cost effectiveness of this strategy compared to placebo from a Social Security perspective.
METHOD: Costs, probabilities of short-term complications, associated care, effectiveness of Imocur during the winter period were based on review of the literature, national health statistics and consulting experts' opinions. An incremental cost-effectiveness model was used.
RESULTS: The mean direct cost for an ARP is €49.5. Among children with recurrent infection, 1.52 infections during the winter period is avoided using this type of prevention and Social Security saves approximately €68 per child on the cost of care. The sensitivity analyses confirm the robustness of the model, and show that prevention with Imocur allowed Social Security to save between 28 and 304 € in direct costs for each at-risk individual who received preventive treatment. The threshold analysis shows that this type of prophylaxis is economically profitable for the community starting from 0,15 prevented infections and direct costs of care of an acute infection exceeding 4.77 €. The demonstration is valid with recurrently-infected children, a population for which the effectiveness of Imocur has been established. If we had taken into account other payers' viewpoints and the indirect costs, our conclusions would have been reinforced.
CONCLUSION: Non-specific immunotherapy is a reasonable measure to be considered for prevention of recurrences and should be associated with recommended measures in children at risk. The French health authorities considered the economic value of an effective medication to the community in assessing its usefulness.

PIN18

DIRECT AND INDIRECT COSTS OF RESPIRATORY INFECTIONS

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OBJECTIVES: Morbidity due to respiratory infections leads to significant adverse societal and economic consequences. This study investigates the extent to which treatment for respiratory infections imposes a financial burden on an employer, and documents variations in employer payments between specific respiratory infections.
METHODS: The data source is a rich administrative claims database for a national, Fortune 100 manufacturer. It includes 1997 medical, pharmaceutical, and disability claims for employees, spouses, dependents, and retirees ($n > 100{,}000$) under age 65. The research sample consists of individual patients with one or more medical or disability claims for at least one of eleven infectious respiratory conditions. Resource utilization is contrasted with a 10 percent random sample of the employer's overall beneficiary population.
RESULTS: Direct (medical and pharmaceutical) and indirect (disability and sporadic absenteeism) costs are analyzed. The average per capita annual costs are: for the entire employer population, $2,368; for all respiratory-infection patients, $4,397, and for respiratory-infection employees eligible for disability, $6,838. Total costs for respiratory-infection patients are 1.8 times those for the typical beneficiary. Total costs are highest for patients with pneumonia ($11,544) and lowest for patients with acute tonsillitis and acute pharyngitis ($2,180). Medical and pharmaceutical treatments account for 65% of total costs for all employees with respiratory infections, while the remaining 35% of costs are attributable to disability and sporadic absenteeism.
CONCLUSIONS: Respiratory infections impose a significant financial burden on the employer. Resource utilization by respiratory infection patients is substantial, not only for the direct treatment of respiratory infections, but also for the treatment of co-morbid medical conditions of these patients. These costs also vary considerably by type of respiratory infection. The study also shows that respiratory infections impose substantial indirect costs on employers from work loss associated with these infections.

PIN19

POTENTIAL USE OF FLUOROQUINOLONES IN THE TREATMENT OF PULMONARY TUBERCULOSIS

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